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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/598,477	06/22/2000	Takayuki Nyu	NE-1005-US/KM	5516

21254 7590 12/03/2003
MCGINN & GIBB, PLLC
8321 OLD COURTHOUSE ROAD
SUITE 200
VIENNA, VA 22182-3817

EXAMINER

TSEGAYE, SABA

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 12/03/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/598,477

Applicant(s)

NYU, TAKAYUKI

Examiner

Saba Tsegaye

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-20 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 and 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figures 3, 4a-d, 5a-b, and 6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 4, 9, 10, 12 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Sambamurthy et al. (US 6,393,489).

Regarding claim 1, 2, 9, 10, 12 and 19, Sambamurthy discloses, in Figs. 2, 4, 8A and 9, a transceiver circuit (118, 120) (as in claims 1, 9, 10, 12) of a network node (100) for converting a signal received from a transmission medium to a decoded signal (908) (as in claims 1, 2, 10, 12) that can be recognized by a higher layer (upper LLC layer) and transmitting packets received from the higher layer (upper LLC layer) to the transmission medium (140, 141) (as in claims 1, 10, 12, 19), characterized by:

selector circuitry (117) (as in claims 1, 10, 12); and

Art Unit: 2662

control circuitry (210) (as in claims 1, 10, 12) for controlling the selector circuitry for supplying the decoded signal to the higher layer and supplying, instead of the decoded signal, and idle signal to the higher layer for a predefined time interval which starts at the end timing of a packet transmitted from the higher layer to the transmission medium, the idle signal indicating that the network node is in an idle state (fig. 8, steps 802, 806, 820; column 24, line 61-column 25, line 65).

Regarding claim 4, Sambamurthy discloses the transceiver circuit characterized in that the control circuitry is configured to detect a data end message as an indication of the end of transmission of the packet (column 25, lines 25-28; step 820).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 11, 13-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sambamurthy et al. in view of Brown et al. (US 6,046,817).

Sambamurthy discloses all the claim limitations as stated above. Further, Sambamurthy discloses, in Figs. 9 and 12, a state machine in a receiving mode; exchanging samples between the network node and remote node for an interval beginning with end timing of a packet transmitted from the node to the bus (column 27, lines 41-43; column 31, lines 15-48).

Art Unit: 2662

However, Sambamurthy does not expressly disclose determining a turnaround time between the nodes.

Brown teaches a maximum turnaround time, which refers to the total amount of time that a station may hold onto the communications channel before having to turn it around and allow the other station a chance to use it (column 10, lines 19-25).

It would have been obvious to one ordinary skill in the art at the time the invention was made to add a method that determine a turnaround time between the nodes, such as suggested by Brown, in the method of Sambamurthy in order to prevent bus and node contention.

6. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sambamurthy in view of Ellis et al. (US 6,119,195).

Sambamurthy discloses all the claim limitations as stated above, except for serial to parallel converter and converter is connected to the serial bus via an IEEE-1394 interface.

Ellis teaches a method and apparatus for virtualizing information source/sink points to serial bus (IEEE-1394 standard bus) device into an address space of a processor via a parallel port device.

It would have been obvious to one ordinary skill in the art at the time the invention was made to add IEEE-1394 serial bus standard, such as that suggested by Ellis, in the apparatus of Sambamurthy in order to provide a high-speed data transfer and real-time transfer.

Art Unit: 2662

Allowable Subject Matter

7. Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gugel et al. (US 6,513,085) discloses an IEEE 1394 bus that interfaced utilizing a physical layer to extract the data and a link/transaction layer controller to interface the data from the physical layer to a host system.


LaFollette et al. (US 6,038,234) discloses a method and apparatus for early arbitration in a full duplex bus system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saba Tsegaye whose telephone number is (703) 308-4754. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (703) 305-4744. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

ST
November 26, 2003


JOHN PEZZLO
PRIMARY EXAMINER